

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A database appliance, comprising:

a database server;

a special purpose operating system having a set of components that include some, but not all, components of a general purpose operating system, whose configuration is dictated based on a [[said]]set of services required by the database server; and

a self-configuration module that is capable of performing the steps of:

detecting an environment in which the database appliance is being used; and

configuring the database appliance based upon the detected environment;

wherein the database server is a special purpose database server;

wherein features and configuration of the special purpose operating system are dictated by the special purpose database server and supporting components;

wherein the special purpose database server is specially adapted based upon the services required by a specific type of database usage;

wherein said type of database usage is one of an online transaction processing application or an online analytical processing application;

wherein said database appliance is configured with an amount of resources dedicated to I/O services that is based on whether said specific type of database usage is an online transaction processing application or an online analytical processing application; and

wherein said database appliance is configured with an amount of resources dedicated to computational services that is based upon whether said specific type of database

usage is an online transaction processing application or an online analytical processing application.

2. (original) The database appliance of Claim 1, wherein the database server was generated from another database server by modifying the code of the other database server to optimize the code for execution on said database appliance.
3. (original) The database appliance of Claim 1, wherein the hardware for said database appliance is selected and configured to optimize performance of one or more services to be performed by the database server.
4. (original) The database appliance of Claim 1, wherein the hardware for said database appliance is selected and configured to optimize a cache hit ratio experienced by the database appliance.
5. (canceled)
6. (original) The database appliance of Claim 1, wherein the special purpose operating system performs process scheduling based on shares of CPU time.
7. (cancelled).
8. (previously presented) The database appliance of Claim 1, wherein the special purpose operating system employs a microkernel and an associated service module.

9. (previously presented) The database appliance of Claim 1, wherein the database server includes a mechanism for reading resource information within an address space of a kernel of the operating system without causing a context switch to the operating system kernel address space.
10. (cancelled)
11. (previously presented) The database appliance of Claim 1, wherein said specific type of database usage is an online transaction processing application and said database appliance is configured with relatively more resources dedicated to I/O services and relatively fewer resources dedicated to computational services.
- 12-15. (cancelled).
16. (previously presented) A method for constructing a database appliance, comprising:
installing, on a computer readable medium accessible to one or more processors, a
database server;
generating a set of components of a special purpose operating system by removing one
or more features of a general purpose operating system that are not required to
provide a set of services required by the database server; and
installing, on the computer readable medium, the special purpose operating system;
wherein the set of components include some, but not all, components of the general
purpose operating system;

wherein configuration of the special purpose operating system is dictated based on the set of services.

17. (original) The method of Claim 16, wherein the database server was generated from another database server by modifying the code of the other database server to optimize the code for execution on said database appliance.
18. (original) The method of Claim 16, wherein the hardware for said database appliance is selected and configured to optimize performance of one or more services to be performed by the database server.
19. (original) The method of Claim 16, wherein the hardware for said database appliance is selected and configured to optimize a cache hit ratio experienced by the database appliance.
20. (original) The method of Claim 16, wherein the database server is a special purpose database server, wherein features and configuration of the special purpose operating system are dictated by the special purpose database server and supporting components, and wherein the special purpose database server is specially adapted based upon the services required by a specific type of database usage.
21. (original) The method of Claim 16, wherein the special purpose operating system performs process scheduling based on shares of CPU time.

22. (original) The method of Claim 16, wherein the method further comprises:
installing on the computer readable medium a self-configuration module that is capable
of performing the steps of:
detecting an environment in which the database appliance is being used; and
configuring the database appliance based upon the detected environment.
23. (previously presented) The method of Claim 16, wherein the special purpose operating
system employs a microkernel and an associated service module.
24. (previously presented) The method of Claim 16, wherein the database server includes a
mechanism for reading resource information within an address space of a kernel of the
operating system without causing a context switch to the operating system kernel
address space.
25. (original) The method of Claim 20, wherein said type of database usage is one of an
online transaction processing application and an online analytical processing
application, wherein said database appliance is configured with an amount of resources
dedicated to I/O services that is based on whether said specific type of database usage is
an online transaction processing application or an online analytical processing
application, and wherein said database appliance is configured with an amount of
resources dedicated to computational services that is based upon whether said specific
type of database usage is an online transaction processing application or an online
analytical processing application.

26. (original) The method of Claim 20, wherein said specific type of database usage is an online transaction processing application and said database appliance is configured with relatively more resources dedicated to I/O services and relatively fewer resources dedicated to computational services.

27-30. (cancelled).

31. (previously presented) The database appliance of Claim 1, wherein the step of modifying the general purpose operating system includes adding one or more features to the general purpose operating system, and wherein the one or more features are used to provide said set of services to the database server.

32. (cancelled).

33. (previously presented) The method of Claim 16, wherein the step of modifying the general purpose operating system includes adding one or more features to the general purpose operating system, and wherein the one or more features are used to provide said set of services to the database server.

34. (cancelled).